

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/996,206	11/28/2001	Dennis H. Vaders	27502/35075	1251	
7590 12/11/2003			EXAMINER		
Joseph W. Ber Liniak, Berenate	renato, III o, Longacre & White, LL	YAO, SAMCHUAN CUA			
6550 Rock Spring Drive, Ste. 240			ART UNIT	PAPER NUMBER	
Bethesda, MD	20817	1733			
			DATE MAILED: 12/11/200	3	

Please find below and/or attached an Office communication concerning this application or proceeding.

			4* 31					
·			Application No. Applicant(s)					
		09/996,	206	VADERS, DENNIS	ADERS, DENNIS H.			
	Office Action Summary	Examin	er	Art Unit				
			uan C. Yao	1733				
Period fo	The MAILING DATE of this communic or Reply	ation appears on t	he cover sheet w	ith the correspondence add	ress			
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIO nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commu period for reply specified above is less than thirty (30) period for reply is specified above, the maximum stature to reply within the set or extended period for reply eply received by the Office later than three months afted patent term adjustment. See 37 CFR 1,704(b).	CATION. f 37 CFR 1.136(a). In no entermined in the state of the state	event, however, may a catutory minimum of thin will expire SIX (6) MON pplication to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this com BANDONED (35 U.S.C. § 133).	nmunication.			
1)⊠	Responsive to communication(s) filed	on <u>06 November</u>	<u>2003</u> .					
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
5)□ 6)⊠ 7)□	Claim(s) <u>1-22</u> is/are pending in the ap 4a) Of the above claim(s) <u>7,9,12,17,18</u> Claim(s) is/are allowed. Claim(s) <u>1-6,8,10,11,13-16,19 and 20</u> Claim(s) is/are objected to. Claim(s) are subject to restricti	3.21 and 22 is/are		consideration.				
	on Papers		•					
9) 🗌 :	The specification is objected to by the	Examiner.						
	The drawing(s) filed on is/are:		o) objected to	by the Examiner.				
	Applicant may not request that any objecti	ion to the drawing(s)	be held in abeyar	nce. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the	· ·	_	· · · · ·	- •			
-	The oath or declaration is objected to I	by the Examiner. N	Note the attached	d Office Action or form PTC	·-152.			
_	inder 35 U.S.C. §§ 119 and 120							
a)[* S 13)	Acknowledgment is made of a claim for All b) Some * c) None of: 1. Certified copies of the priority do action for the priority do application from the International certified detailed Office action cknowledgment is made of a claim for none a specific reference was included of CFR 1.78. The translation of the foreign lang cknowledgment is made of a claim for foreign lang cknowledgment is made of a claim for ference was included in the first sente	ocuments have be ocuments have be the priority document all Bureau (PCT Rufor a list of the ceredomestic priority uin the first sentence uage provisional adomestic priority u	en received. en received in A nents have been ule 17.2(a)). tified copies not under 35 U.S.C. te of the specific upplication has b under 35 U.S.C.	application No received in this National State received. § 119(e) (to a provisional a ation or in an Application Dueen received. §§ 120 and/or 121 since a	application) ata Sheet. specific			
Λ 44 n c h · · · ·	(6)							
2) 🔲 Notice	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO nation Disclosure Statement(s) (PTO-1449) Pap			Summary (PTO-413) Paper No(s). nformal Patent Application (PTO-1				

Art Unit: 1733

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1,6 and 10 are rejected under 35 U.S.C. 102(a, e) as being anticipated by WO 00/67972 A1.

WO '972 discloses a process of making a patterned lignocellulosic fibrous board, the process comprises forming a loose fiber mat (4) including a binder-coated fibers; pre-compressing the mat into a board having a generally uniform density; machining the board to form a desired pattern on the board; and, then heat-pressing the board using a pair of platens which have the same pattern as the machining pattern (abstract; page 2 lines 13-26; page 3 lines 7-14; page 4 lines 4-12; page 4 line 30 to page 25; page 6 lines 1-20; figures 1-3). Though not explicitly disclosed, in view of the similarity of the production processes between the process taught by WO '972 and the recited process; and since a resultant patterned fibrous board has non-uniform thickness formed from a board with a

Art Unit: 1733

uniform density (figures 2a-2b), the resultant patterned fibrous board must have a variable weight basis.

3. Claims 1,6 and 10 are rejected under 35 U.S.C. 102(a, e) as being anticipated by Luck et al (US 4,275,027). See column 5 lines 18-44; col. 6 lines 24-53; column 11 lines 39-53; claims 1-9, figure 3.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/67972 A1 as applied to claim 1 above in numbered paragraph 2.

With respect to claims 2-4, WO '972 does not expressly depositing resin binder and fibers onto a perforated conveyor belt having a suction device underneath the belt to hold a mat on the belt. However, such would have been obvious in the art as such is a notoriously common practice in the board making art. As for the recited removing step using a rotary tool, see figure 4b of the WO '972 patent. As for using a pair of platens in the pre-compressing step, such would have been obvious in the art as such is conventional in the art.

With respect to claim 5, one in the art would have determined, by routine experimentation, a suitable/desired density in forming a board taught by WO '972

Art Unit: 1733

and would have applied an appropriate pressure to obtain the suitable/desired density.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/67972 A1 as applied to claim 6 above in numbered paragraph 2, and further in view of Wiemann (US 6,409,856 B1).

It would have been obvious in the art to machine a board and form a desired pattern on its surface using a brushing roller (taken to be a scalping roller) similar to the one taught by Wiemann, as such is a well known means to shape a fiber mat to desired surface configuration as exemplified in the teachings Wiemann (figures 2-9). It is worthnoting that, Wiemann teaches depositing cellulosic particles with binding agent onto a carrier web (taken to be a conveyor belt) in a scattering/forming station (col. 1 lines 5-13; col. 2 line 65 to col. 3 line 4).

7. Claims 11 and 13-16, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/67972 A1 as applied to claim 1, 5, 6 or 10 above in numbered paragraph 2 or 5, and further in view of Wiemann (US 6,409,856 B1) and Himmelheber et al (US 2,822,024).

With respect to claim 11, it would have been obvious in the art to gather and to recycle trimmed cellulosic material during a machining process using a brushing roller similar to a process taught by Wiemann, because Himmelheber et al teaches the desirability of recycling excess cellulose resulting from a stripping operation using a brushing roller.

Art Unit: 1733

With respect to claim 13, see the discussion in claim 11 and in numbered paragraph 4, for the recited depositing, suction, and gathering steps. As for the scalping step, since WO '972 teaches forming a uniform density board by precompressing a fiber mat (page 2 lines 13-26), and since Himmelheber et all teaches scalping the surface of a mat formed from a scattering station so that the mat has uniform weight distribution (col. 1 lines 15-24), the scalping limitation would have been obvious in the art. Lastly, as for the recited pressing, machining, and compressing steps, see the discussion of WO '972 set forth numbered paragraph 2.

With respect to claims 14-16 and 19-20, these claims are essentially repetition of the above rejected claims, for the same reasons set forth above, these claims would have been obvious in the art.

8. Claims 2-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luck et al (US 4,275,027) as applied to claim 1 or 6 above in numbered paragraph 3, and further in view of Wiemann (US 6,409,856 B1).

It would have been obvious in the art to deposit resin binder and fibers onto a perforated conveyor belt having a suction device underneath the belt to hold a mat on the belt, as such is a notoriously common practice in the board making art. As for a rotary tool such as a scalping roller to trim a consolidated blank to shape the blank to a desired configuration, such would have been obvious in the art as such is conventional in the art as exemplified in the teachings of Wiemann (figures 2-10).

Art Unit: 1733

With respect to claim 5, see column 6 lines 38-45 of the Luck et al patent. With respect to claim 11, the limitation in this claim is old in the art in order to recycle waste trimmed cellulose material.

9. Claims 13-16, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luck et al (US 4,275,027) as applied to claim 1, 5, 6 or 10 above in numbered paragraph 2, and further in view of Wiemann (US 6,409,856 B1) and Himmelheber et al (US 2,822,024).

With respect to claim 13, see numbered paragraph 8 above, for the recited depositing and suction steps. As for the recited scalping and gathering steps, it is conventional in the art to scalp a top surface of a fiber mat in order to form a mat with uniform thickness and recycle excess cellulose material as exemplified in the teachings of Himmelheber.

With respect to claims 14-16 and 19-20, these claims are essentially repetition of the above rejected claims, for the same reasons set forth above, these claims would have been obvious in the art.

Election/Restrictions

10. Claims 7,9, 12,17-18 and 21-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 11-04-03. Note: claim 12 is directed to a consolidated cellulosic article, therefore it is also withdrawn from consideration.

Page 7

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff H Aftergut can be reached on (703) 308-2069. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2058.

Sam Chuan C. Yao Primary Examiner Art Unit 1733

Scy 12-07-03